Spread of disease tied to US combat deployments
Stateside doctors are left grappling
By John Donnelly, Globe Staff | May 7, 2007

WASHINGTON -- A parasitic disease rarely seen in United States but common in the Middle East has infected an estimated 2,500 US troops in the last four years because of massive deployments to remote combat zones in Iraq and Afghanistan, military officials said.

Leishmaniasis , which is transmitted through the bite of the tiny sand fly, usually shows up in the form of reddish skin ulcers on the face, hands, arms, or legs. But a more virulent form of the disease also attacks organs and can be fatal if left untreated.

In some US hospitals in Iraq, the disease has become so commonplace that troops call it the "Baghdad boil." But in the United States, the appearance of it among civilian contractors who went to Iraq or among tourists who were infected in other parts of the world has caused great fear because family doctors have had difficulty figuring out the cause.

The spread of leishmaniasis (pronounced LEASH-ma-NYE-a-sis) is part of a trend of emerging infectious diseases in the United States in recent years as a result of military deployments, as well as the pursuit of adventure travel and far-flung business opportunities in the developing world, health officials say.

Among those diseases appearing more frequently in the United States are three transmitted by mosquitoes: malaria, which was contracted by 122 troops last year in Afghanistan; dengue fever; and chikungunya fever.

Nathan Yang , 42, a civilian from Dorchester, contracted visceral leishmaniasis -- the most serious form of the disease -- most likely during a vacation to Greece last September. Yang, who works for an Internet travel company, said it took Boston doctors more than three months to determine what was causing his night sweats, chills, and low-grade fevers.

Fortunately, prodding by Yang's sister, an infectious disease doctor practicing in Annapolis, Md., led to a test at a US military laboratory, which found that he had the disease. Until then, a doctor had suggested removing Yang's spleen, which was enlarged because of the illness.

"It was kind of worrying not knowing what it was," said Yang, who said he feels much better after taking medications.

Leishmaniasis has long hounded the US military in its past deployments to the Middle East.

During World War II, troops in the Persian Gulf region reported high incidences of the disease; during the deployment for the first Gulf War, in 1990-91, just 31 cases were reported -- which received large headlines in the United States because it was unusual. But military officials interpreted the numbers as an improvement, reflecting good preventive techniques as well as troops spending more time in urban areas.

But the increasing cases in the last few years, which has gone almost completely unnoticed, has been due in part to a breakdown of efforts aimed at protecting troops from getting bitten by sand flies, military officials acknowledged. About 80 percent of the cases are from Iraq and most of the others are from Afghanistan.

When Army Colonel Peter J. Weina , director of the leishmania diagnostics laboratory at the Walter Reed Army Institute of Research in Silver Spring, Md., spent months traveling around Iraq in 2003, he found that some commanders had taken no precautions to guard against infection.

The military recommends making sure troops have bed nets and uniforms treated with the insect repellant permethrin , applying the chemical DEET to exposed areas of skin, and wearing long pants, socks, and long-sleeved shirts while outside.

"In some areas, every one had heard about bed nets and about leishmaniasis, but other military units were totally oblivious," Weina said.

He said the lack of attention to leishmaniasis is understandable, though: "From the perspective of the person on the ground, they are bombarded with so many concerns. The way the war is going now, getting a little sore that may or may not go away is minor compared to losing your leg" in a roadside bomb attack.

The sand flies, which are a third the size of a mosquito, don't actually fly, but hop, giving them a limited range. Weina took sand fly samples from several parts of Iraq and found parasites from Basra to Mosul. He also found scores of cases of Iraqi children hospitalized with leishmaniasis.

The World Health Organization estimates 2 million new cases of leishmaniasis each year in 88 countries, ranging from rain forests in Costa Rica to the deserts of Iraq and Iran. In the United States, infections are very rare.

On average, about 100 American tourists or business travelers have contracted the disease in recent years, more than in past years because of more frequent travel to areas where the parasite flourishes, the US Centers for Disease Control and Prevention said.

The sharp increase in cases in the US military has also raised concerns about transmission of leishmaniasis from person to person.

While scientists found little evidence suggesting that the disease can be transmitted through blood transfusions, the US Food and Drug Administration, not wanting to take a risk, advised in late 2003 that US citizens traveling to Iraq should not be allowed to donate blood for a year upon their return -- and Americans diagnosed with leishmaniasis should be banned from donating blood over their lifetime. Weina, the Army medical researcher, said there is less reason to believe that the disease could be transmitted through casual or sexual contact. While some cases suggest that leishmaniasis might have occurred between couples, Weina said, no scientific study has proven it. But the wife of a civilian contractor who returned from Iraq with leishmaniasis said she fears she may have already been exposed to the disease.

"If you consider it can be transmitted sexually, and my husband has it, and I could have it as well, I'm furious," said Marcie Hascall Clark of Satellite Beach, Fla., whose husband, Merlin, spent two months clearing minefields in Iraq. Clark said she was also concerned because symptoms of leishmaniasis sometimes do not show for months or even years in some cases. "I worry that a lot of soldiers are coming back and they don't even know they have it," she said.

Beverly Rorrer of Zanesfield, Ohio, said her husband, Ken, served seven months in a National Guard unit in Iraq and returned home last fall with a large sore on his left leg. After waiting months for a correct diagnosis, Rorrer said, they learned about leishmaniasis only after she happened to watch a PBS documentary.

"I've told more than a few people that it's amazing what is out there in this world," Rorrer said. "We are fortunate and blessed not to come in contact with it every day."

http://www.boston.com/news/nation/articles/2007/05/07/spread_of_disease_tied_to_us_combat_deployments/